

## SUPPLEMENT NO. 1 TO PART 783—DEADLINES FOR SUBMISSION OF REPORTS AND AMENDMENTS

Reports	Applicable forms	Due dates
Initial Report .....	Forms AP-1 and AP-2 and: —AP-3 or AP-4 for R&D activities; ..... —AP-5 for civil nuclear-related manufacturing, assembly or construction; and. —AP-6 for mining and ore beneficiation .....	December 1, 2008 for: (1) Any activities in which you were engaged on October 31, 2008 and (2) uranium hard-rock mines that have changed from operating or suspended status to closed-down status during calendar year 2008 (up to and including October 31, 2008). For activities commencing after October 31, 2008, <i>Initial Reports</i> must be submitted no later than January 31 of the year following any calendar year in which the activities began, <i>unless</i> you are required to submit an <i>Annual Update Report</i> because of on-going previously “reported” activities at the same location—in that case, you may include the new activities in your <i>Annual Update Report</i> , instead of submitting a separate <i>Initial Report</i> .
Annual Update Report	Forms AP-1 and AP-2 and: —AP-3 or AP-4 for R&D activities; ..... —AP-5 for civil nuclear-related manufacturing, assembly or construction; and.  —AP-6 for mining and ore beneficiation.	January 31 of the year following any calendar year in which the activities took place or there were changes to previously “reported” activities.
No Changes Report ....	Form AP-17 .....	January 31 of the year following any calendar year in which there were no changes to previously “reported” activities or location information.
Import Confirmation Report.	Forms AP-1, AP-2, and AP-14 .....	Within 30 calendar days of receiving notification from BIS.
Supplemental Information Report.	Forms AP-1, AP-2, and AP-15 .....	Within 15 calendar days of receiving notification from BIS.
Amended Report: —Report information —Organization and location information. —Complementary access letter.	Form AP-1 and appropriate forms, as specified in § 783.1 of the APR, for the type of report being amended.	Amended report due: —30 calendar days after you discover an error or omission in activity information contained in your most recent report. —30 calendar days after a change in company information or ownership of a location. —30 calendar days after receipt of a post-complementary access letter from BIS.

SUPPLEMENT NO. 2 TO PART 783—  
MANUFACTURING ACTIVITIES

*The following constitute manufacturing activities that require the submission of a report to BIS, pursuant to § 783.1(a)(2) of the APR.*

(1) The manufacture of *centrifuge rotor tubes* or the assembly of *gas centrifuges*. *Centrifuge rotor tubes* means thin-walled cylinders as described in section 5.1.1(b) of supplement no. 3 to this part. *Gas centrifuges* means centrifuges as described in the Introductory Note to section 5.1 of supplement no. 3 to this part.

(2) The manufacture of *diffusion barriers*. *Diffusion barriers* means thin, porous filters as described in section 5.3.1(a) of Supplement No. 3 to this Part.

(3) The manufacture or assembly of *laser-based systems*. *Laser-based systems* means systems incorporating those items as described in section 5.7 of Supplement No. 3 to this Part.

(4) The manufacture or assembly of *electromagnetic isotope separators*. *Electromagnetic*

*isotope separators* means those items referred to in Section 5.9.1 of supplement no. 3 to this part containing ion sources as described in section 5.9.1(a) of supplement no. 3 to this part.

(5) The manufacture or assembly of *columns* or *extraction equipment*. *Columns* or *extraction equipment* means those items as described in sections 5.6.1, 5.6.2, 5.6.3, 5.6.5, 5.6.6, 5.6.7, and 5.6.8 of Supplement No. 3 to this Part.

(6) The manufacture of *aerodynamic separation nozzles* or *vortex tubes*. *Aerodynamic separation nozzles* or *vortex tubes* means separation nozzles and vortex tubes as described, respectively, in sections 5.5.1 and 5.5.2 of Supplement No. 3 to this Part.

(7) The manufacture or assembly of *uranium plasma generation systems*. *Uranium plasma generation systems* means systems for the generation of uranium plasma as described in section 5.8.3 of supplement no. 3 to this part.

(8) The manufacture of *zirconium tubes*. *zirconium tubes* means tubes as described in section 1.6 of supplement no. 3 to this part.

(9) The manufacture or upgrading of *heavy water or deuterium*. *Heavy water or deuterium* means deuterium, heavy water (deuterium oxide) and any other deuterium compound in which the ratio of deuterium to hydrogen atoms exceeds 1:5000.

(10) The manufacture of *nuclear grade graphite*. *Nuclear grade graphite* means graphite having a purity level better than 5 parts per million boron equivalent and with a density greater than 1.50 g/cm<sup>3</sup>.

(11) The manufacture of *flasks for irradiated fuel*. A *flask for irradiated fuel* means a vessel for the transportation and/or storage of irradiated fuel that provides chemical, thermal and radiological protection, and dissipates decay heat during handling, transportation and storage.

(12) The manufacture of *reactor control rods*. *Reactor control rods* means rods as described in section 1.4 of supplement no. 3 to this part.

(13) The manufacture of *critically safe tanks and vessels*. *Critically safe tanks and vessels* means those items as described in sections 3.2 and 3.4 of supplement no. 3 to this part.

(14) The manufacture of *irradiated fuel element chopping machines*. *Irradiated fuel element chopping machines* means equipment as described in section 3.1 of supplement no. 3 to this part.

(15) The construction of *hot cells*. *Hot cells* means a cell or interconnected cells totaling at least 6 cubic meters in volume with shielding equal to or greater than the equivalent of 0.5 meters of concrete, with a density of 3.2 g/cm<sup>3</sup> or greater, outfitted with equipment for remote operations.

#### SUPPLEMENT NO. 3 TO PART 783—LIST OF SPECIFIED EQUIPMENT AND NON-NUCLEAR MATERIAL FOR THE REPORTING OF IMPORTS

##### 1. REACTORS AND EQUIPMENT THEREFOR

###### 1.1. COMPLETE NUCLEAR REACTORS

Nuclear reactors capable of operation so as to maintain a controlled self-sustaining fission chain reaction, excluding zero energy reactors, the latter being defined as reactors with a designed maximum rate of production of plutonium not exceeding 100 grams per year.

EXPLANATORY NOTE: A “nuclear reactor” basically includes the items within or attached directly to the reactor vessel, the equipment which controls the level of power in the core, and the components which normally contain or come in direct contact with or control the primary coolant of the reactor core. It is not intended to exclude reactors which could reasonably be capable of modi-

fication to produce significantly more than 100 grams of plutonium per year. Reactors designed for sustained operation at significant power levels, regardless of their capacity for plutonium production, are not considered as “zero energy reactors.”

###### 1.2. REACTOR PRESSURE VESSELS

Metal vessels, as complete units or as major shop-fabricated parts therefor, which are specially designed or prepared to contain the core of a nuclear reactor, as defined in section 1.1, and are capable of withstanding the operating pressure of the primary coolant.

EXPLANATORY NOTE: This is the list that the IAEA Board of Governors agreed at its meeting on 24 February 1993 would be used for the purpose of the voluntary reporting scheme, as subsequently amended by the Board. A top plate for a reactor pressure vessel is covered by this section 1.2 as a major shop-fabricated part of a pressure vessel. Reactor internals (e.g., support columns and plates for the core and other vessel internals, control rod guide tubes, thermal shields, baffles, core grid plates, diffuser plates, etc.) are normally supplied by the reactor supplier. In some cases, certain internal support components are included in the fabrication of the pressure vessel. These items are sufficiently critical to the safety and reliability of the operation of the reactor (and, therefore, to the guarantees and liability of the reactor supplier), so that their supply, outside the basic supply arrangement for the reactor itself, would not be common practice. Therefore, although the separate supply of these unique, specially designed and prepared, critical, large and expensive items would not necessarily be considered as falling outside the area of concern, such a mode of supply is considered unlikely.

###### 1.3. REACTOR FUEL CHARGING AND DISCHARGING MACHINES

Manipulative equipment specially designed or prepared for inserting or removing fuel in a nuclear reactor, as defined in section 1.1 of this Supplement, capable of on-load operation or employing technically sophisticated positioning or alignment features to allow complex off-load fueling operations such as those in which direct viewing of or access to the fuel is not normally available.

###### 1.4. REACTOR CONTROL RODS

Rods specially designed or prepared for the control of the reaction rate in a nuclear reactor as defined in section 1.1 of this Supplement.

EXPLANATORY NOTE: This item includes, in addition to the neutron absorbing part, the support or suspension structures therefor if supplied separately.